RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

| Application Serial Number: | 10/531,402 |
|----------------------------|------------|
| Source: | P.G. |
| Date Processed by STIC: | 7/6/06 |
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RAW SEQUENCE LISTING DATE: 07/06/2006
PATENT APPLICATION: US/10/531,402 TIME: 14:08:58

Input Set : F:\CELL0294.ST25.txt

Output Set: N:\CRF4\07062006\J531402.raw

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3 <110> APPLICANT: Humphreys, David Paul
             Chapman, Andrew Paul
             Robinson, Martyn Kim
     5
             Spitali, Mariangela
      6
      8 <120> TITLE OF INVENTION: E. COLI HOST CELLS WITH MODIFIED PHOS/PSTS PERIPLASMIC
     9
            PHOSPHATE-BINDING PROTEINS, AND METHOD OF MANUFACTURING
             RECOMBINANT FABS
    12 <130> FILE REFERENCE: CELL-0294
     14 <140> CURRENT APPLICATION NUMBER: US 10/531,402
C--> 15 <141> CURRENT FILING DATE: 2005-04-14
     17 <150> PRIOR APPLICATION NUMBER: PCT/GB2003/004474
     18 <151> PRIOR FILING DATE: 2003-10-15
     20 <150> PRIOR APPLICATION NUMBER: GB 0224082.8
     21 <151> PRIOR FILING DATE: 2002-10-16
     23 <160> NUMBER OF SEO ID NOS: 31
     25 <170> SOFTWARE: PatentIn version 3.3
     27 <210> SEQ ID NO: 1
     28 <211> LENGTH: 21
     29 <212> TYPE: DNA
     30 <213> ORGANISM: Escherichia coli
     32 <400> SEQUENCE: 1
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     37 <211> LENGTH: 42
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     46 <211> LENGTH: 42
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     50 <400> SEQUENCE: 3
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     55 <211> LENGTH: 24
     56 <212> TYPE: DNA
     57 <213> ORGANISM: Escherichia coli
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65 <212> TYPE: DNA

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Input Set : F:\CELL0294.ST25.txt

| 66 <213> ORGANISM: Escherichia coli | |
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| 68 <400> SEQUENCE: 5 | |
| 69 cggcctggaa gcttattaat cgtcatcgtc atcgtcgtac agcggcttac cgctactgtc | 60 |
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| 73 <211> LENGTH: 73 | |
| 74 <212> TYPE: DNA | |
| 75 <213> ORGANISM: Escherichia coli | |
| 77 <400> SEQUENCE: 6 | 60 |
| 78 cggcctggaa gcttattaat cgtcatcgtc atcgtcgtac agcgggtccc cgctactgtc | 73 |
| 80 tttaatattg gtc 83 <210> SEQ ID NO: 7 | , 5 |
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| 85 <212> TYPE: DNA | |
| 86 <213> ORGANISM: Escherichia coli | |
| 88 <400> SEQUENCE: 7 | |
| 89 cgccgcgacc ttatcgatga gtgcttaata agtgattgaa gaagcaagcc tgacaggtgc | 60 |
| 91 agg | 63 |
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| 95 <211> LENGTH: 23 | |
| 96 <212> TYPE: DNA | |
| 97 <213> ORGANISM: Escherichia coli | |
| 99 <400> SEQUENCE: 8 | |
| 100 gcgttcgttc agcgtctgcc ggg | 23 |
| 103 <210> SEQ ID NO: 9 | |
| 104 <211> LENGTH: 21 | |
| 105 <212> TYPE: DNA | |
| 106 <213> ORGANISM: Escherichia coli 108 <400> SEQUENCE: 9 | |
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| 112 <210> SEO ID NO: 10 | |
| 113 <211> LENGTH: 22 | |
| 114 <212> TYPE: DNA | |
| 115 <213> ORGANISM: Escherichia coli | |
| 117 <400> SEQUENCE: 10 | |
| 118 ccaatattaa agacagtagc gg | 22 |
| 121 <210> SEQ ID NO: 11 | |
| 122 <211> LENGTH: 24 | |
| 123 <212> TYPE: DNA | |
| 124 <213> ORGANISM: Escherichia coli | |
| 126 <400> SEQUENCE: 11 | |
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| 131 <211> LENGTH: 21 | |
| 132 <212> TYPE: DNA | |
| 133 <213> ORGANISM: Escherichia coli 135 <400> SEQUENCE: 12 | |
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PATENT APPLICATION: US/10/531,402 TIME: 14:08:58

Input Set : F:\CELL0294.ST25.txt

| | <212> TYPE: DNA <213> ORGANISM: Escherichia coli | |
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| 148 | <210> SEQ ID NO: 14 | |
| 149 | <211> LENGTH: 24 | |
| 150 | <212> TYPE: DNA | |
| 151 | <213> ORGANISM: Escherichia coli | |
| 153 | <400> SEQUENCE: 14 | |
| 154 | tacgacgatg acgatgacga ttaa | 24 |
| 157 | <210> SEQ ID NO: 15 | |
| 158 | <211> LENGTH: 21 | |
| 159 | <212> TYPE: DNA | |
| 160 | <213> ORGANISM: Escherichia coli | |
| 162 | <400> SEQUENCE: 15 | |
| 163 | gcttaataag tgattgaaga a | 21 |
| 166 | <210> SEQ ID NO: 16 | |
| 167 | <211> LENGTH: 90 | |
| 168 | <212> TYPE: DNA | |
| 169 | <213> ORGANISM: Escherichia coli | |
| 171 | <400> SEQUENCE: 16 | |
| 172 | ctgaagtccg gagaactggt gctggatggt aaaaccctcg gcgacatcta cctgggcgaa | 60 |
| | atcaagaagt gggatgatga agccatcgcc | 90 |
| | <210> SEQ ID NO: 17 | |
| 178 | <211> LENGTH: 90 | |
| 179 | <212> TYPE: DNA | |
| 180 | <213> ORGANISM: Escherichia coli | |
| 182 | <400> SEQUENCE: 17 | |
| 183 | ctgaagtccg gagaactggt gctggatggt aaaaccctcg gcgacatcta cctgggcgaa | 60 |
| | atcgaagaat gggatgatga agccatcgcc | 90 |
| | <210> SEQ ID NO: 18 | |
| | <211> LENGTH: 90 | |
| 190 | <212> TYPE: DNA | |
| 191 | <213> ORGANISM: Escherichia coli | |
| 193 | <400> SEQUENCE: 18 | |
| 194 | ctgaagtccg gagaactggt gctggatggt aaaaccctcg gcgacatcta cctgggcaaa | 60 |
| 196 | atcgaaaagt gggatgatga agccatcgcc | 90 |
| 199 | <210> SEQ ID NO: 19 | |
| 200 | <211> LENGTH: 90 | |
| 201 | <212> TYPE: DNA | |
| 202 | <213> ORGANISM: Escherichia coli | |
| | <400> SEQUENCE: 19 | |
| 205 | ctgaagtccg gagaactggt gctggatggt aaaaccctcg gcgacatcta cctgggcaaa | 60 |
| | atcgaagaat gggatgatga agccatcgcc | 90 |
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| | <211> LENGTH: 90 | |
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| 213 | <213> ORGANISM: Escherichia coli | |
| 215 | <400> SEQUENCE: 20 | |
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RAW SEQUENCE LISTING DATE: 07/06/2006
PATENT APPLICATION: US/10/531,402 TIME: 14:08:58

Input Set : F:\CELL0294.ST25.txt

| 216 | ctgaagteeg gagaactggt getggatggt aaaaeeeteg gegacateta eetgggeaa | a 60 |
|-----|--|-------|
| | atcaaggaat gggatgatga agccatcgcc | 90 |
| | . <210> SEQ ID NO: 21 | |
| 222 | <211> LENGTH: 33 | |
| 223 | <212> TYPE: DNA | |
| 224 | <213> ORGANISM: Escherichia coli | |
| 226 | <400> SEQUENCE: 21 | |
| 227 | gtgctggaat tcttcgactg ggcgtacaaa acc | 33 |
| | <pre></pre> | |
| | <211> LENGTH: 84 | |
| 232 | 2 <212> TYPE: DNA | |
| 233 | <213> ORGANISM: Escherichia coli | |
| 235 | 5 <400> SEQUENCE: 22 | |
| 236 | gaagatgcat ggcctattac ctctaccacg ttcattctga tccacgaaga tcaggaaga | .a 60 |
| | Ccagaacaag gcacagaagt gctg | 84 |
| | <210> SEQ ID NO: 23 | |
| | 2 <211> LENGTH: 84 | |
| 243 | 3 <212> TYPE: DNA | |
| 244 | <213> ORGANISM: Escherichia coli | |
| 246 | 5 <400> SEQUENCE: 23 | |
| 247 | gaagatgcat ggcctattac ctctaccacg ttcattctga tccacgaaga tcaggaaaa | a 60 |
| | ccagaacaag gcacagaagt gctg | 84 |
| | 2 <210> SEQ ID NO: 24 | |
| 253 | 3 <211> LENGTH: 84 | |
| 254 | 4 <212> TYPE: DNA | |
| 255 | <pre>5 <213> ORGANISM: Escherichia coli</pre> | |
| 257 | 7 <400> SEQUENCE: 24 | |
| 258 | B gaagatgcat ggcctattac ctctaccacg ttcattctga tccacgaaga tcagaagga | a 60 |
| 260 | ccagaacaag gcacagaagt gctg | 84 |
| 263 | 3 <210> SEQ ID NO: 25 | |
| 264 | 4 <211> LENGTH: 84 | |
| 265 | 5 <212> TYPE: DNA | |
| 266 | 5 <213> ORGANISM: Escherichia coli | |
| 268 | 3 <400> SEQUENCE: 25 | |
| | 9 gaagatgcat ggcctattac ctctaccacg ttcattctga tccacgaaga tcagaagaa | ia 60 |
| 271 | ccagaacaag gcacagaagt gctg | 84 |
| 274 | 4 <210> SEQ ID NO: 26 | |
| 275 | 5 <211> LENGTH: 84 | |
| | 5 <212> TYPE: DNA | |
| | 7 <213> ORGANISM: Escherichia coli | |
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| |) gaagatgcat ggcctattac ctctaccacg ttcattctga tccacaaaga tcaggaaga | |
| | 2 ccagaacaag gcacagaagt gctg | 84 |
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| | 7 <212> TYPE: DNA | |
| | 3 <213> ORGANISM: Escherichia coli | |
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| 291 | l gaagatgcat ggcctattac ctctaccacg ttcattctga tccacaaaga tcaggaaaa | ia 60 |
| | | |

RAW SEQUENCE LISTING DATE: 07/06/2006 PATENT APPLICATION: US/10/531,402 TIME: 14:08:58

Input Set : F:\CELL0294.ST25.txt

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| 296 | <210> SEQ ID NO: 28 | |
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| 304 | ccagaacaag gcacagaagt gctg | 84 |
| 307 | <210> SEQ ID NO: 29 | |
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| 309 | <212> TYPE: DNA | |
| 310 | <213> ORGANISM: Escherichia coli | |
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| 316 | <210> SEQ ID NO: 30 | |
| 317 | <211> LENGTH: 36 | |
| 318 | <212> TYPE: DNA | |
| 319 | <213> ORGANISM: Escherichia coli | |
| 321 | <400> SEQUENCE: 30 | |
| 322 | gtcgaagaat tccagcactt ctgtgccttg ttctgg | 36 |
| 325 | <210> SEQ ID NO: 31 | |
| 326 | <211> LENGTH: 95 | |
| 327 | <212> TYPE: DNA | |
| 328 | <213> ORGANISM: Escherichia coli | |
| 330 | <400> SEQUENCE: 31 | |
| 331 | cgataagctt attaatcgtc atcgtcatcg tcgtacagcg gttcaccgct actgtcttca | 60 |
| 333 | atattggttt cccacgcagc gcgaacctgt tcaac | 95 |
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VERIFICATION SUMMARY

DATE: 07/06/2006

PATENT APPLICATION: US/10/531,402

TIME: 14:08:59

Input Set : F:\CELL0294.ST25.txt

Output Set: N:\CRF4\07062006\J531402.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date